

DOUGLAS BATTERY MFG CO -- LEAD/ACID STORAGE BATTERY -- 6140-01-134-5413

===== Product Identification =====

Product ID:LEAD/ACID STORAGE BATTERY

MSDS Date:05/01/2000

FSC:6140

NIIN:01-134-5413

Status Code:A

MSDS Number: CKWTG

=== Responsible Party ===

Company Name:DOUGLAS BATTERY MFG CO

Address:500 BATTERY DR

Box:12159

City:WINSTON-SALEM

State:NC

ZIP:27117-2159

Country:US

Info Phone Num:800-368-4527

Emergency Phone Num:(336)650-7245/7257

Chemtrec Ind/Phone:(800)424-9300

CAGE:63432

=== Contractor Identification ===

Company Name:BATTERY OUTLET OF HAMPTON INC

Address:2815 GEORGE WASHINGTON HWY

Box:City:TABB

State:VA

ZIP:23602

Country:US

Phone:804-867-8280

Contract Num:SP0413-01-M-0417

CAGE:0FTM0

Company Name:DOUGLAS BATTERY MFG CO

Address:500 BATTERY DR

Box:12159

City:WINSTON-SALEM

State:NC

ZIP:27107

Country:US

Phone:800-368-4527

CAGE:63432

===== Composition/Information on Ingredient =====

ts =====

Ingred Name:LEAD/LEAD OXIDE/LEAD SULFATE
CAS:7439-92-1
RTECS #:OF7525000
= Wt:60.
ACGIH TLV:0.15 MG/M3
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY
CAS:7440-36-0
RTECS #:CC4025000
Minumum % Wt:.5
Maxumum % Wt:2.5
OSHA PEL:0.5 MG/M3
ACGIH TLV:0.5 MG/M3
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC
CAS:7440-38-2
RTECS #:CG0525000
< Wt:.1
ACGIH TLV:0.01 MG/M3
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID (BATTERY ELECTROLYTE)
CAS:7664
-93-9
RTECS #:WS5600000
Minumum % Wt:10.
Maxumum % Wt:38.
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3
ACGIH STEL:3 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:CALCIUM
CAS:7440-70-2
RTECS #:EV8040000
< Wt:.15

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:CHRONIC: ACID CAN CAUSE IRRITATION OF
EYES, NOSE, THROAT. BRE

ATHING MIST PRODUCES RESPIRATORY DIFFICULTY,
CONTACT WITH SKIN AND EYS CAUSES IRRITATION AND SKIN BURN. ACUTE:
REPEATED CONTACT WITH SULFUR IC ACID BATTERY ELECTROLYTE FLUID MAY
CAUSE DRYING OF THE SKIN WHICH MAY RESULT IN IRRITATION AND
DERMATITIS. PROLONGED INHALATION OF A MIST OF SULFURIC ACID CAN
CAUSE INFLAMMATION OF THE UPPER RESPIR ATORY TRACT LEADING TO
CHRONIC BRONCHITIS. SHORT TERM LIQUID OR VAPOR CONTACT MAY RESULT
IN EYE IRRITATION AND ACID BURNS. PROLONGE

D CONTACT TO STRONG ACID

FUMES MAY RESULT IN EROSION OF TOOTH ENAMEL.

Explanation of Carcinogenicity:THE INTERNATIONAL AGENCY FOR RESEARCH ON
CANCER (IARC) HAS CLASSIFIED "STRONG INORGANIC ACID MIST CONTAINING
SULFURIC ACID" AS A CATEGORY 1 CARCINOGEN, A SUBSTANCE THAT IS
CARCINOGENIC TO HUMANS. THIS CLASSIFICATION DOES NOT APPLY TO
LIQUID FORMS OF SULFURIC ACID OR SULFURIC ACID SOLUTIONS CONTAINED
WITHIN A BATTERY.

Effects of Overexposure:CHRONIC: ACID CAN CAUSE IRRITAT
ION OF EYES,

NOSE, THROAT. BREATHING MIST PRODUCES RESPIRATORY DIFFICULTY,
CONTACT WITH SKIN AND EYS CAUSES IRRITATION AND SKIN BURN. ACUTE:
REPEATED CONTACT WITH SULFUR IC ACID BATTERY ELECTROLYTE FLUID MAY
CAUSE DRYING OF THE SKIN WHICH MAY RESULT IN IRRITATION AND
DERMATITIS. PROLONGED INHALATION OF A MIST OF SULFURIC ACID CAN
CAUSE INFLAMMATION OF THE UPPER RESPIR ATORY TRACT LEADING TO
CHRONIC BRONCHITIS. SHORT TERM LIQUID OR VAPOR CONTACT MAY RESULT
IN EYE I

RRITATION AND ACID BURNS. PROLONGED CONTACT TO STRONG ACID
FUMES MAY RESULT IN EROSION OF TOOTH ENAMEL.

Medical Cond Aggravated by Exposure:SULFURIC ACID MIST MAY IRRITATE
BRONCHIAL SYSTEM, EYES AND SKIN.

===== First Aid Measures =====

First Aid:SULFURIC ACID-INHALATION: MOVE TO VENTILATED AREA. OBTAIN
MEDICAL ATTENTION. EYES: WASH THE EYES WITH COPIOUS QUANTITIES OF
RUNNING WATER FOR 15 MINUTES. OBTAIN MEDICAL ATTENTION. SKIN: FLUSH
AR

EA WIT H LARGE AMOUNTS OF RUNNING WATER. REMOVE CONTAMINATED
CLOTHING AND OBTAIN MEDICAL ATTENTION. INGESTION: WASH OUT MOUTH
WITH RUNNING WATER. DO NOT INDUCE VOMITING. CALL PHYSICIAN.

===== Fire Fighting Measures =====

Autoignition Temp:=357.2C, 675.F

Autoignition Temp Text:POLYPR

Lower Limits:4.1%

Upper Limits:74.2%

Extinguishing Media:HALON, DRY CHEMICAL.

Fire Fighting Procedures:LEAD/ACID BATTERIES DON'T BURN, OR BURN WITH
DIFFICULTY. EXTINGUI

SH FIRE WITH AGENT SUITABLE FOR SURROUNDING COMBUSTIBLE MATERIALS. COOL EXTERIOR OF BATTERY IF EXPOSED TO FIRE TO PREVENT RUPTURE. THE ACID MIST AND VAPORS GENERATED BY HEAT OR FIRE ARE CORROSIVE. WEAR RESPIRATORY PROTECTION (SCBA) & PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:HYDROGEN GAS & SULFURIC ACID VAPORS ARE GENERATED UPON OVERCHARGING. HYDROGEN GAS MAY BE FLAMMABLE OR EXPLOSIVE WHEN MIXED WITH AIR, OXYGEN, OR CHLORINE. ENSURE ADEQUATE VENTILATION OF C

HARGING AREAS CONSISTENT WITH OSHA (29 CFR 1910 &1926), NATIONAL FIRE CODE, ACGIH AND OTHER RELEVANT STANDARDS.

===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE CLOTHING. VENTILATE ENCLOSED AREAS. DIKE TO CONTAIN CONTAMINATED MATERIALS & LIQUIDS. LIMIT SITE ACCESS TO QUALIFIED EMERGENCY RESPONDERS. NEUTRALIZE ACID SPILLS WITH SODIUM BICARBONAT E (SODA ASH), CALCIUM CARBONATE, AGRICULTURAL LIME OR EQUIVALENT COMMERCIAL PRODUCT. COLLECT ALL MATERIAL FOR PROPER DISPOSAL.

Neutralizing Agent:SODIUM BICARBONATE (SODA ASH), CALCIUM CARBONATE, AGRICULTURAL LIME OR EQUIVALENT COMMERCIAL PRODUCT.

===== Handling and Storage =====

Handling and Storage Precautions:STORE BATTERIES IN COOL, DRY, WELL-VENTILATED AREA. DO NOT SHORT CIRCUIT BATTERY TERMINALS OR REMOVE VENT CAP DURING STORAGE OR CHARGING. AVOID ROUGH HANDLING WHICH COULD RESULT IN SPILLS OR LEAKS. DO NOT SMOKE OR USE OPEN FLAMES IN CHARGING AREAS. WASH THOROUGHLY AFTER HANDLING PRODUCT.

Other Precautions:AVOID PROLONGED OVERCHARGING OR COMBUSTION WHICH COULD LIBERATE HAZARDOUS GASES AND LIQUIDS INCLUDING HYDROGEN, SULFURIC ACID, SULFURIC ACID MIST, SULFUR DIOXIDE, SULFUR TRIOXIDE, ARSINE OR STIBINE GA S. MATERIAL SHOULD BE KEPT ON SITE FOR SPILL NEUTRALIZATION AND CONTAINMENT.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:S

ULFURIC ACID MIST-FULL FACE OR HALF MASK
RESPIRATOR WITH ACID MIST FILTER OR SCBA.

Ventilation:CHANGE AIR EVERY 15 MIN. LOCAL EXHAUST: NO.
MECHANICAL(GENERAL): NO INFORMATION FOUND.

Protective Gloves:ACID RESISTANT RUBBER OR PLASTIC.

Eye Protection:SPLASH RESISTANT GOGGLES OR SAFETY GLASSES WITH FACE
SHIELD.

Other Protective Equipment:ACID RESISTANT RUBBER OR PLASTIC APRON,
BOOTS AND PROTECTIVE CLOTHING.

Supplemental Safety and Health

=====
Physical/Chemical Properties

HCC:C1

Boiling Pt:=135.C, 275.F

B.P. Text:ELECTROLYTE

Melt/Freeze Pt:>160.C, 320.F

M.P/F.P Text:POLYPROPYLENE

Vapor Pres:ELECTROLYTE-1MMHG@145.8F

Vapor Density:0.069 HYDR

Spec Gravity:ELECTROLYTE-1.080-1.400

pH:ELECTROLYTE